of the brake ring, and owing to the disposition of the rods 28 and 29 on opposite sides of the cylinder 22, the forces are balanced and no turning moment is produced. As the brake members wear and therefore vary in size the variation can be compensated for by advancing the cross-bar farther on to the piston 24.

In the claims annexed hereto I have employed the term "annular brake member" to describe the flange 17 of the drum 15 with the understanding that this term is not limited to a hollow member but also includes a solid member, as for example, a solid drum of the axial thickness of the flange 17. I have also employed the term "a periphery" in reference to the brake member, and this I intend to include either the inner or outer periphery of a brake drum having a flange as illustrated in the drawings, it being understood that my invention is also applicable to brake mechanism in which the brake ring is disposed within instead of without the brake drum.

What I claim is:—

1. In fluid braking apparatus for automobiles and the like, the combination of an annular brake member mounted on a rotary portion of the automobile, a second annular brake member arranged to make frictional engagement with a periphery of the first brake member, the second brake member having a gap in its circumference, a cylinder mounted at one side of the gap, reciprocating means within the cylinder, means for supplying fluid under pressure to the cylinder thereby to reciprocate the reciprocating means therein, and means connecting the reciprocating means with the second brake member on the other side of said gap so that the length of the gap is varied and the pressure between the brake members is controlled by the reciprocation of the reciprocating means within the cylinder, said connecting means being adjustable so as to vary the normal length of said gap.

2. In fluid braking apparatus for automobiles and the like, the combination of a brake drum, a brake ring bearing upon a periphery of the drum, the brake ring having a gap in its circumference, a cylinder mounted on the brake ring on one side of said gap, a piston in the cylinder arranged to be reciprocated in a direction away from said gap by fluid supplied to the cylinder under pressure, and a yoke connecting with the piston and with the brake ring on the other side of said gap so as to cause the brake ring to grip the brake drum when the piston is reciprocated, the yoke comprising members disposed on opposite sides of the cylinder, and means for adjusting the normal length of said gap.

3. In fluid braking apparatus for automobiles and the like, the combination of a brake drum, a brake ring bearing upon the outer periphery of the drum, the brake ring having a gap in its circumference, a cylinder mounted on the brake ring on one side of said gap longitudinally of the gap, a piston in the cylinder arranged to be reciprocated in a direction away from the gap by fluid supplied to the cylinder under pressure, a piston rod extending outwardly through the end of the cylinder opposite said gap, a cross member connecting with the piston rod outside the cylinder, members on opposite sides of the cylinder connecting the cross member with the brake ring on the opposite side of said gap so as to cause the brake ring to grip the brake drum when the piston is reciprocated, and means for adjusting the cross member along the piston rod thereby to vary the normal length of said gap.

Signed by me at Santa Barbara, this 11th day of January, 1917.

MALCOLM LOUGHEAD.